Manitoba
Attorney General

OFFICE OF
THE
CHIEF MEDICAL EXAMINER

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HISTORICAL BACKGROUND

(Coroner System - Medical Examiner System)

The Medical Examiner and the Medical Examiner system has evolved from duties which were assigned to Coroners and systems put in place to effect the legislated and non-legislated responsibilities of the office.

The word coroner is a derivation from the old French spelling of the word "crown". The office of "Crowner" (crown representatives) was originally established to secure revenues which accrued to the crown in the event of sudden or unexplained deaths.

The first detailed statute on the office of coroner was the 1275 Statute of Westminister which established the office for revenue purposes. Subsequent British legislation shifted the coroner's responsibility to the investigation of deaths due to violence or unnatural means but retained the revenue aspect through a fee payable to the coroner for each inquest held.

Historically, Canada inherited the concepts of a Coroner and of a Coroner's inquest as part of the common law. The common law powers of a coroner to indict persons upon an inquisition for murder or manslaughter, to commit them for trial and to certify evidence were incorporated as part of the Canadian Criminal law in 1892, at which time the indictment function of the inquest was terminated.

The subsequent enactment of Provincial legislation established the jurisdiction and role of the Coroner and continued the coroner's functions of investigating deaths, empanelling juries and conducting inquisitions (inquests). In some provinces and territorial jurisdictions the coroner concept still remains.

With the advancement of the Forensic Sciences and Pathologists specially trained in Forensic Medicine, it seemed logical that with a bulk of reportable cases being medical in nature that, instead of reporting to Lay Coroners, that the reporting be done to qualified medical persons. From this evolved the Medical Examiner System.

It was as recent as 1971 that Manitoba enacted and proclaimed THE FATALITY INQUIRIES ACT to replace THE CORONER'S ACT. This statute was re-enacted in 1975 and with subsequent minor amendments, remains in force today.

The significant features of the current Act is the division of responsibilities into the medical and legal disciplines; the initial inquiry into the cause and manner of death being carried out by a duly qualified medical practitioner and the inquest, when deemed necessary, being conducted by a Provincial Judge without a jury.

This brief historical background has been provided to explain that in Manitoba the Medical Examiner system, while of relatively recent origin, has been both legislatively and operationally implemented and fully replaced the Coroner system.

INTRODUCTION

The Office of the Chief Medical Examiner in Manitoba is responsible under the Fatality Inquiries Act and the Vital Statistics Act for the investigation and certification of all deaths by violence, as well as unexpected, unexplained or unattended deaths. Certain hospital and institutional cases, notably those of persons dying within ten days of surgery or anaesthesia, are investigated, as are deaths of persons held involuntarily.

The area of jurisdiction is the province of Manitoba, which has a population of approximately 1.1 million. In addition, the Medical Examiner has jurisdiction over those who travel through the province.

The medical examiner system, under the direction of the Chief Medical Examiner, is managed from a central office located in Winnipeg. The office administers the complete province of Manitoba and has a permanent staff of one administrative officer, three medical investigators and two administrative secretaries. The fee-for-service element is provided by approximately 73 part-time medical examiners with additional fee-for-service support provided by pathologists, funeral directors and ambulance services.

In the City of Winnipeg, three medical investigators are on duty daily Monday to Friday during standard working hours. Part-time medical examiners are available and on call during the evenings and weekends. Throughout rural Manitoba and in other cities such as Brandon, Thompson, etc., part-time medical examiners are available on an as-required basis 24 hours a day.

Toxicology testing is provided by the Royal Canadian Mounted Police Forensic Laboratory. Other speciality tests are provided on an as-required basis, utilizing outside resources both in and out of the Province of Manitoba.

In 1987, 2530 deaths were investigated by the Chief Medical Examiner's office. This represented approximately thirty per cent of all deaths in Manitoba during the year. In each case, the report generated by the medical examiner or medical investigator contained information on the cause, manner, and circumstances surrounding the death. In many cases the police, both RCMP and municipal forces, assist the medical examiners in conducting their investigations.

In January of 1985, the Office of the Chief Medical Examiner became actively involved in the eye donor program. Next of kin were contacted shortly after death and asked to consent to donating the cornea of the deceased. Through the program, fifteen pairs of eyes were made available to the Lions Eye Bank in 1987. This represented a positive response, and as a result it is planned to continue the program.

Appreciation is expressed to all Law Enforcement Agencies and all other related agencies involved who have, through the year, cooperated and assisted in the investigations which have been processed through this office. Also , gratitude is expressed to all Medical Examiners who have shown a high level of dedication, and professionalism, frequently under adverse conditions.

Caseload Statistics

TOTAL CASES

CERTIFIED CASES

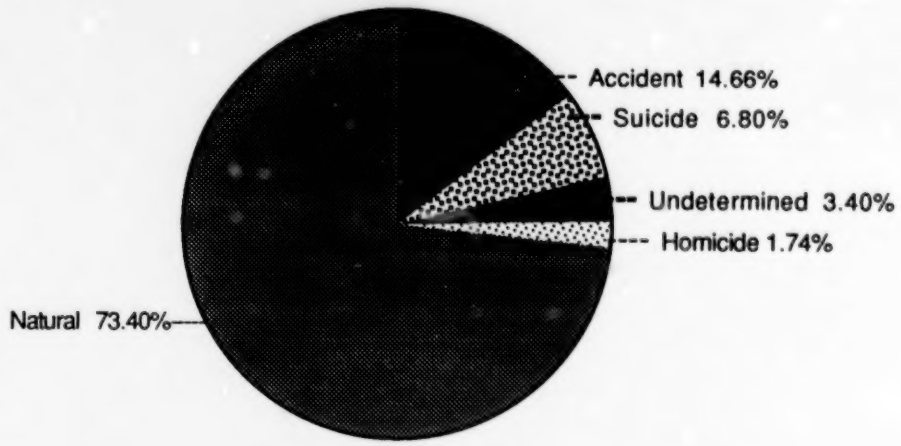
Manner of Death	Cases	Aggregate Rate per 100,000 population
Natural	1857	171.9
Accidents in the home	73	6.8
Accidents in other places	95	8.8
Industrial Accidents	17	1.6
Motor Vehicle Accidents	186	17.2
Suicides	172	15.9
Homicides	44	4.1
Undetermined	86	8.0
Total	2530	234.3

Note: 428 natural deaths were designated Medical Examiner's Investigators cases.

REGIONAL DISTRIBUTION OF CASES

	Urban	Rural	Total
Natural	1411	446	1857
Accidents in the Home	40	33	73
Accidents in other Places	22	73	95
Industrial Accidents	7	10	17
Motor Vehicle Accidents	61	125	186
Suicides	92	80	172
Homicides	32	12	44
Undetermined	62	24	86
TOTAL	1727	803	2530

MEDICAL EXAMINER CASES



CASELOAD REVIEW 1972 - 1987

YEAR	TOTAL
1972	2320
1973	2409
1974	2409
1975	2604
1976	2653
1977	2758
1978	2667
1979	2627
1980	2480
1981	2683
1982	2480
1983	2545
1984	2386
1985	2522
1986	2605
1987	2503

TYPES OF DEATH INVESTIGATED AND CERTIFIED

HOMICIDES

	Male	Female	TOTAL
Urban	22	10	32
Rural	7	5	12
TOTAL	29	15	44

AGE/METHOD

Method	Age: 0-9	10-19	20-29	30-39	40-49	50-59	over 60	TOTAL
Police	0	0	1	0	0	0	0	1
Blunt Weapon/ Violence	0	1	4	4	1	2	4	16
Firearms	2	0	4	3	1	1	0	11
Stabbing/ Incised Wound	0	0	4	2	1	3	0	10
Child Battery	2	0	0	0	0	0	0	2
Other	0	0	2	1	0	0	1	4
TOTAL	4	1	15	10	3	6	5	44

SUICIDES

AGE GROUP	MALE	FEMALE	TOTAL	RATE/100,000 POPULATION
0 - 9	0	0	0	0.0
10 - 19	13	8	21	1.9
20 - 29	36	7	43	4.0
30 - 39	21	8	29	2.7
40 - 49	23	8	31	2.9
50 - 59	14	7	21	1.9
60 - 69	9	1	10	0.9
70 - 79	8	7	15	1.4
80 - 89	1	1	2	0.2
OVER 90	0	0	0	0.0
TOTAL	125	47	172	15.9

REGION/MONTH

Month of Death	Urban	Rural	TOTAL
January	8	5	13
February	11	11	22
March	11	3	14
April	8	8	16
May	6	3	9
June	7	13	20
July	8	7	15
August	5	5	10
September	4	5	9
October	6	7	13
November	6	6	12
December	12	7	19
TOTAL	92	80	172

SUICIDE RATES PER 100,000 POPULATION BY YEAR

Year	Estimated Population (000's)	Total Suicides	Rate/ 100,000
1973	996.2	124	12.5
1974	1,007.5	141	14.0
1975	1,013.6	141	13.9
1976	1,021.5	141	13.8
1977	1,027.4	179	17.4
1978	1,032.0	155	15.0
1979	1,028.0	135	13.1
1980	1,024.9	126	12.3
1981	1,026.2	151	14.7
1982	1,034.5	149	14.4
1983	1,048.1	172	16.4
1984	1,058.8	151	14.3
1985	1,070.6	141	13.2
1986	1,071.2	168	15.7
1987	1,080.3	172	15.9

METHOD

	Male	Female	TOTAL	PERCENTAGE OF TOTAL
Drug overdose/Poison	8	21	29	17%
Carbon monoxide	13	1	14	8%
Hanging/Strangulation	35	11	46	27%
Drowning	4	2	6	4%
Firearms	56	6	62	36%
Jumping	4	0	4	2%
Other	5	6	11	6%
TOTAL	125	47	172	100%

NATIONAL SUICIDE RATES* PER 100,000 POPULATION 1977 - 1987

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
National Rate	14.3	14.8	14.1	14.0	14.0	13.9	15.1	13.7	12.9	14.5	14.0
NFLD	03.7	02.6	04.4	03.4	04.2	06.0	06.2	06.7	04.0	04.0	04.9
PEI	10.0	13.1	13.1	11.4	07.4	08.9	12.9	12.0	03.9	11.1	08.6
NS	11.3	12.5	12.6	11.5	10.9	12.2	12.1	09.9	12.0	10.8	12.6
NB	10.5	12.9	12.1	11.6	11.1	12.9	14.2	12.6	12.0	13.5	10.5
QUE	12.4	14.2	15.4	14.8	16.4	16.5	18.5	15.7	17.1	17.6	17.9
ONT	14.5	14.3	13.0	13.1	12.5	12.7	12.9	12.3	11.4	12.4	11.5
MAN	17.5	15.4	14.7	11.8	14.0	13.4	15.8	12.7	11.9	14.3	15.8
SASK	15.6	17.3	14.9	15.9	17.7	17.5	14.9	13.5	13.0	13.7	13.0
ALTA	17.9	16.5	15.4	18.1	15.9	16.2	16.7	17.2	12.6	17.9	16.1
BC	17.6	18.3	16.2	14.8	14.5	15.0	14.8	13.4	10.4	14.7	14.1
YUKON**	02.4	03.2	02.7	05.0	02.2	02.9	03.6	02.3	03.5	04.3	02.8
NWT**	02.8	05.5	01.8	02.0	02.2	01.7	04.3	03.4	02.5	02.9	02.9

* Source: Statistics Canada

** Rates based on 10,000

TRAFFIC ACCIDENTS

Motor Vehicle			
- Alcohol related	80		
- Not alcohol related	106		
TOTAL	186		
Vehicle/Pedestrian	34	Vehicle/Train	5
Vehicle/Vehicle	70	Vehicle/Fixed object	0
Single vehicle	47	Multiple vehicle	0
Snowmobile	2	Motorcycle	6
All terrain cycle	7	Vehicle/Motorcycle	4
Minibike/Off road	2	Vehicle/Cyclist	7
Motorhome	0	Other	2
		TOTAL TRAFFIC FATALITIES	**186**

NON-TRAFFIC ACCIDENTS

A. INDUSTRIAL

Farming	5
Mining	1
Other	11
TOTAL	17

B. IN OTHER PLACES

Aircraft	8
Exposure	12
Drowning	42
Carbon monoxide poisoning	0
Falls	8
Hunting	1
Falling objects	1
Other	23
TOTAL	95

C. IN THE HOME

Falls	24
Asphyxia	10
Inhalation burning house	21
Burns/Scalding	3
Electrocution	0
Drugs/Alcohol	7
Inhalation (Sniffing)	0
Other	8
TOTAL	73

Total non-traffic accidents	185
TOTAL ACCIDENTAL DEATHS	**371**

NATURAL DEATHS

CAUSE OF DEATH	MALE	FEMALE	TOTAL
Heart	650	386	1036
Cancer	65	61	126
Lung	124	50	174
Haemorrhage	93	64	157
Operative	15	2	17
Post-operative	88	63	151
Sudden Infant Death Syndrome	9	4	13
Stillborn	2	2	4
Undetermined	11	11	22
Other	79	78	157
TOTAL	1136	721	1857

AGE GROUP	MALE	FEMALE	TOTAL
under 1 year	23	18	41
1 - 9	1	4	5
10 - 19	5	4	9
20 - 29	11	8	19
30 - 39	30	11	41
40 - 49	71	24	95
50 - 59	136	58	194
60 - 69	319	145	464
70 - 79	335	206	541
80 - 89	178	183	361
90 - 99	24	51	75
over 100 years	0	4	4
unknown	3	5	8
TOTAL	1136	721	1857

SUDDEN INFANT DEATH SYNDROME

AGE GROUP	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0 - 4 Months	0	1	3	1	0	0	0	2	1	2	0	1
5 - 8 Months	1	0	0	0	0	0	0	0	0	0	0	1
9 - 12 Months	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	1	3	1	0	0	0	2	1	2	0	2

In Manitoba S.I.D.S. accounted for 13 infant deaths in 1987. The overall incidence of S.I.D.S. have been reported as 1 case per 1,000 live births. Although it can occur at any time during the first year of life, the peak incidence in Manitoba is during the first four months.

S.I.D.S. STATISTICS 1974-1987

1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
33	31	32	34	24	21	23	34	22	28	22	23	22	13

UNDETERMINED* DEATHS

CAUSE OF DEATH	MALE	FEMALE	TOTAL
Asphyxia	4	0	4
Carbon monoxide poisoning	2	0	2
Drowning	5	2	7
Drugs/Alcohol overdose	16	9	25
Falls	0	0	0
Other	26	22	48
TOTAL	53	33	86

* Undetermined whether accidental, suicide, or homicide

INQUESTS

INQUESTS SUMMARY
(January 1, 1987 - December 31, 1987)

Judicial Recommendations For the Prevention of Similar Deaths

Manner of Death	Given	Not Given	
Natural	0	1	
Homicide	0	1	
Suicide	2	1	
Accident	7	8	
Undetermined	1	2	
TOTAL	10	13	**23**

TYPE OF INQUESTS

A. HOSPITAL/INSTITUTIONAL RELATED

Accidental	3
Suicide	2
Natural	1
TOTAL	6

B. OCCUPATIONAL RELATED

Accidental	7
TOTAL	7

C. POLICE/INCARCERATION RELATED

Suicide	1
Undetermined	1
Accidental	2
Homicide	1
TOTAL	5

D. SPORTS/RECREATIONAL RELATED

TOTAL	0

E. OTHER

Undetermined	2
Accidental	3
TOTAL	5

TOTAL INQUESTS 23

Summary of Inquests and Recommendations

(All deaths occurred in 1987)

Case	Description	Judicial Recommendations
1. Congestive heart failure	Accidental. Deceased died post-operatively as he was not transfused due to religious reasons.	None.
2. Traumatic head injuries	Accidental. Deceased was cleaning a grain bin on a rope ladder when he fell from the 20-foot level.	1) Establish a policy that forbids bin entries from the top of an elevator by elevator staff. 2) Ladder rungs with a secure foot grip ought to be put in place.
3. Crush injury to chest	Accidental. Construction worker buried to chest level by a trench cave-in.	None.
4. Hypothermia	Accidental. Deceased, a deaf-mute intoxicated person, was taken to her residence and left outside her house as they were unable to enter house.	None.
5. Pneumonia	Undetermined. An infant who died of malnutrition.	Not available.
6. Consistent with drowning	Undetermined. While supervising a mentally retarded person, the deceased fell into the Red River.	None.

Case	Description	Judicial Recommendations
7. Asphyxia, hanging	Suicide. Deceased was an inmate at the Headingley Correctional Institute.	1) That at all correctional institutions, remand centres and lock-ups, the staff be adequately equipped with rescue knives. 2) That staff members at correctional institutions be certified in C.P.R.. 3) That a standardized manner of observance of inmates in cells be instituted so as to lessen the likelihood of missing incidents of self-inflicted or other injuries or illness. 4) That particularily in cases of mental depression coupled with the approach of such an inmates release date, that more attention be arranged during rounds by staff.
8. Massive crush injury to the head	Accidental. Yardman working at Symington Yards when a crane toppled over knocking down a 40-foot pole.	None.
9. Alcohol Intoxication	Accidental. Deceased was apprehended under the I.P.D.A. and taken to the Main Street Project.	None.
10. Gunshot wound	Homicide. Deceased was shot during a police action.	None.
11. No anatomical cause of death	Undetermined. Picked up by the police on a warrant and held in the Provincial Remand Centre.	1) That if at all possible, consideration be given to establishing a specially equipped medical observation unit in the existing Provincial Remand Centre, as well as in any future Provincial Remand Centre.
12. Ruptured descending thorasic aorta	Accidental. Mine worker who was crushed by falling rock.	None.

Case	Description	Judicial Recommendations
13. Pneumonia	Accidental. Construction worker buried up to neck level by a cave-in.	1) That existing procedures for proper shoring and guidlines for entering excavations be followed.
14. Ruptured left ectopic pregnancy	Natural. Deceased went to nursing station complaining of acute abdominal pain. Received treatment and died next morning.	None.
15. Asphyxia, choked on food	Accidental. Compulsory resident of S.M.H.C. who choked during breakfast.	None.
16. Asphyxia, self strangulation	Suicide. Voluntary resident of E.M.H.C. who tied a pillow case around his neck.	None.
17. Mulitiple trauma	Accidental. Construction worker who was run over by a gravel truck.	1) Unless use is made of a person to direct traffic in similar operations, all movement, backward or forward, of ordinarily stationary tandem trucks, should be preceeded by audible sound of the horn equipment installed in the truck.
18. Electrical injury	Accidental. Electrician working on a ladder at the two storey level of the H.B.M. & S.C. who came in contact with 6900 volts.	1) A written safe job procedure to be which includes a better means of access to the equipment than a step ladder. 2) That access to the basement or any other area be made only under authorized permission. 3) All lock-out procedures to be strictly enforced and all employees to be notified of such.
19. Asphyxia, drowning	Suicide. Compulsory resident of B.M.H.C. eloped and was found floating in the Assiniboine River.	1) Both front entrances of the Centre should be equipped with "panic bars" and automatic buzzers which activate when the door is opened (especially in the evenings). One door is so equipped now. Present locking of the main door (for fire safety reasons) should be avoided.

Case	Description	Judicial Recommendations
		2) Provision should be made for more visual observation of the coming and going of patients during office hours, near to the exit doors. By the physical layout of the areas adjacent to the exits, this is more easily accomplished at the lower exit where a staff member on duty during the day can observe patients. Perhaps a small counter or office could be placed on the main floor along the hallway leading to the main exit, for this purpose. 3) Another consideration may be to install a fence around the entire grounds. I am not suggesting a jail-like fence but rather a five or six foot high , green, vinyl covered fence which would blend in with the surroundings and in fact could hardly be noticable by patients or the public. In conjunction with the fence, which would not impinge onto the two main entrances to the grounds, a booth, manned by a custodian could be placed at each of the two entrances. Such custodian would simply observe the coming and going of patients on foot. There would be no gate or interferance with other traffic. By radio to the Centre, the custodian could determine if the patient seeking to leave the grounds was authorized to do so. The custodians could be on duty on a 24-hour basis, or only during office hours, if the above referred to buzzer system is in place in the evenings.
20. Traumatic decapitation and broken neck	Accidental. Deceased and a passenger were riding an A.T.V. that struck a barrier.	None.

Case	Description	Judicial Recommendations
21. Asphyxia, drowning	Accidental. Resident of a group home who drowned while bathing.	1) That Community Services assist in studying the causes of, and remedies for, this vexing problem. 2) That instructions be given to senior staff to bring families into the care and treatment of the residents for the mutual benefit of all concerned. 3) That steps be taken to ensure all pertinent documents, including the discharge reports, can be delivered to the primary care givers.
22. Multiple injuries	Accidental. Deceased disembarked city transit bus, purse caught in rear door and was dragged some distance.	1) That the timing mechanism which operates the pnumatic door be set all year round in order to allow adequate closure time for persons to disembark safely, particularly those who may be elderly or handicapped.
23. Chest and abdominal injuries	Accidental. Decedents were passengers in a motor vehicle which was in collision with a snow grader.	1) That the Department of Highways accellerate the plan to upgrade the lighting on all graders in the Province. 2) That the government enact clear regulations as to how often snow plows must pull over and stop on the shoulder to allow traffic to pass. 3) That a public awareness program be implemented in order to increase public awareness of the dangers of slow moving plows and the difficulty of seeing the plows when snow is blowing up behind them. 4) That research should be undertaken as to possible bumper protection for the rear of snow plows to cushion the impact of rear end collisions. 5) That the Department implement a program of having trucks follow behind with clearly visible warning lights and signs advising of the slow moving plows.